

Amendments to the Specification:

Please amend the specification as follows:

Please replace paragraphs 13, 33, 41 and 46 with the following marked up version substitute paragraphs for the examiner's consideration.

A¹
[0001] Thus, there is a need for an interconnect or via having less resistance while not experiencing electromigration in via or line failures. Further, there is a need for a method of forming a large grain size interconnect having ~~staffed~~ stuffed grain boundaries for high electromigration reliability. Even further, there is a need for a method of using ternary copper alloy to obtain a low resistance and large grain size interconnect.

A²
[0002] Advantageously, the ternary copper alloy of via section 420 provides a low resistance interconnect or via, large grain size interconnect, and ~~staffed~~ stuffed grain boundaries. Large grain size promote electromigration reliability because the crystal structure interferes with the mobility of the copper ions. Large grain size also provides lower interconnect resistance. ~~Staffed~~ Stuffed grain boundaries increase electromigration reliability because of reduction or restriction of Cu diffusion pathways along grain boundaries.

A³
[0003] Referring to FIGURE 5, a portion 500 of an integrated circuit includes a dual damascene via/trench section having a ternary copper alloy. Via/trench section can include increased grain sizes 520, reduced resistance and ~~staffed~~ stuffed grain boundaries 510 due to the addition of Tin (Sn) and Chromium (Cr). With increased grain, size, ~~staffed~~ stuffed grain boundaries 510 and reduced resistance, via/trench section can have improved electromigration reliability. As described with respect to FIGURE 4, a variety of different techniques can be employed to include elements that lower resistivity and elements that increase grain size. A variety of different elements and combinations of elements can also be used.

A⁴
[0004] Advantageously, use of a ternary copper alloy in the formation of vias or interconnects can provide improved reliability and performance. For example,

Q4

electromigration reliability can be improved due to ~~stuffed~~ stuffed grain boundaries.
Further, electromigration is improved due to increased grain size.
